UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

JUL 13 2016

REPLY TO THE ATTENTION OF: E-19J

Mr. Rick Amidon
U.S. Fish and Wildlife Service, Ecological Services
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458

Re: Draft Environmental Impact Statement for the Midwest Wind Energy Multi-Species Habitat Conservation Plan for Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin

Dear Mr. Amidon:

The U.S. Environmental Protection Agency has reviewed the U.S. Fish and Wildlife Service's (Service) above-mentioned Draft Environmental Impact Statement (Draft EIS) dated April 2016. This letter provides EPA's comments on the Draft EIS, pursuant to our authorities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

As stated in the Draft EIS, private landowners, corporations, state or local governments, or other non-Federal landowners who wish to conduct activities on their land that might incidentally harm or take wildlife listed as endangered or threatened under the Endangered Species Act (ESA) must implement measures to avoid impacts to those species, obtain an incidental take permit (ITP) from the Service, or risk enforcement action by the Service. The Service is considering whether to issue ITPs, pursuant to Section 10(a)(1)(B) of the ESA, as amended, under the Midwest Wind Energy Multi-Species Habitat Conservation Plan (MSHCP), as described in the Draft EIS. The MSHCP was prepared by the Service and planning partners, for wind energy development within an eight-state Plan Area, defined as all lands within the political boundary of the Midwest Region of the Service, including Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. The geographic area where incidental take authorization would be allowed under the MSHCP is a subset of the Plan Area and specifically excludes lands of particular importance to bat and migratory bird species, as well as a wide range of other wildlife species, referred to as Covered Lands in the MSHCP and the Draft EIS. These excluded areas are described in the Draft EIS.

The proposed action evaluated in the Draft EIS is the approval of the MSHCP, the issuance of ITPs, and concurrence with Certificates of Inclusion (COIs) for Covered Species (six Federally-listed bat and bird species, one bat species that may be listed in the future, and the bald eagle) by the Service. The Services proposes to implement the MSHCP as both a "template" HCP for wind energy project proponents and a "programmatic" HCP implemented through a master permittee. Under a template HCP process, the Service will directly issue individual ITPs to applicants that agree to implement the MSHCP. Under a programmatic HCP process, the Service will issue an ITP to a master permittee, who will be responsible for issuing COIs to wind energy companies that agree to

implement the MSHCP at their facilities (both existing and proposed). Issuance of COIs by the master permittee will be completed in coordination with, and with concurrence from, the Service. The master permittee is anticipated to be comprised of a board with representation from the wind energy industry and wind energy development-related conservation interests.

The purpose of the proposed action by the Service is to review and approve requests for ITPs and COIs and to streamline the permitting process under the MSHCP which, if granted, will authorize the incidental take of Covered Species resulting from existing and future wind energy development within Covered Lands[1].

The proposed term of the MSHCP is 45 years. During the first 5 years, existing commercial wind energy projects can apply for and receive incidental take authorizations under the MSHCP; proposed commercial wind energy facilities could opt-in during the first 15 years of the MSHCP. Incidental take authorizations will be issued for a period of 30 years, up to the 45-year term of the MSHCP. The master permit will be issued for a period that is equal to the entire length of the plan (45 years, or whatever the remaining life of the MSHCP is once that entity is in place); however, all individual ITPs and COI will be issued for a period of only 30 years.

The Draft EIS analyzes impacts associated with four alternatives:

- **Alternative A** – Multi-Species Habitat Conservation Plan Alternative - 5 years for existing wind energy facilities[2] and 15 years for new wind energy facilities to opt in;
- **Alternative B** – Reduced Permit Duration Alternative - 5 years for existing wind energy facilities to opt in, and 5 years for new wind energy facilities to opt in;
- **Alternative C** – Increased Cut-In Speed Alternative – other than Required Cut-In Speeds, all other aspects of the MSHCP are the same as described under Alternative A; and
- **Alternative D** – No Action Alternative - the Service will not issue ITPs or concur with COIs for wind-related construction and operational activities under the MSHCP. Future and existing wind energy developers and operators would have to pursue project-specific ESA Section 10(a)(1)(B) permits and/or eagle permits, as necessary.

The Draft EIS indicates that **Alternative A** is the proposed alternative.

Based on EPA's review of the Draft EIS and HCP, we have rated the document and project as **Environmental Concerns-Insufficient Information (EC-2)**; our ratings definitions can be found in the enclosure. EPA has the following comments, categorized by topic.

Section 2.1.2 - Plan Area and Covered Lands

As indicated in this section of the Draft EIS, the following areas are excluded from Covered Lands:

- Land within 20 miles of known sensitive bat hibernacula[3] identified by the Service and state wildlife agencies; this minimizes the potential for impacts on habitats supporting major concentrations of covered bat species;

[1] Covered Lands are defined as the geographic area where incidental take authorization will be allowed under the MSHCP.

[2] All of the action alternatives will allow up to 18,004 MW of existing facilities to opt-in to the MSHCP.

[3] Sensitive bat hibernacula generally include Priority 1 and Priority 2 hibernacula as identified by the Service at the time the plan was developed.

- Land within 3 miles of the shores of the Great Lakes; this minimizes the potential for impacts of wind energy development on migrant water, shorebirds, and other migratory birds;
- Land within 1 mile of the edges of major rivers supporting bird migration corridors and/or concentrations of wintering waterfowl;
- Land within floodplain areas along the Mississippi and Illinois rivers; this minimizes the potential for impacts on important bird and bat migratory corridors;
- Land near high bat concentration areas in southern Indiana and Missouri; and
- Land within bird migratory areas in Illinois and around large lakes in Minnesota.

Recommendations: EPA recommends the rationale for selecting Covered Lands be included in the Final EIS. For example, why were only high bat concentration areas in southern Indiana and Missouri excluded from Covered Lands? Likewise, why were lands only within bird migratory areas in Illinois and around large lakes in Minnesota excluded?

One of the areas excluded from Covered Lands - land within 20 miles of known sensitive bat hibernacula[4] identified by the Service and state wildlife agencies – includes a footnote indicating that "Sensitive bat hibernacula generally include Priority 1 and Priority 2 hibernacula as identified by the Service at the time the plan was developed."

Recommendations: EPA recommends the rationale for "generally" including Priority 1 and Priority 2 hibernacula be included in the Final EIS. As written, this statement implies that some Priority 1 and 2 hibernacula are not protected by the proposal. If Priority 1 and 2 hibernacula are not excluded from the proposal, those hibernacula should be itemized in the Final EIS, complete with potential impacts analyses.

Section 2.1.2 of the Draft EIS describes Covered Lands as a subset of the larger, eight-state Plan Area (reference Figure 1-1) and refers the reader to Figure 1-2. However, the Draft EIS does not contain Figures 1-1 or 1-2. Also, while the Plan Area is shown in Figure 1-1 in the HCP, Covered Lands appear to be associated with Figure 1-4 in the HCP.

Recommendations: EPA recommends the Final EIS contain all necessary Figures for easy reference.

Section 2.2 – Alternatives Analyzed in Detail

The Draft EIS indicates that Alternative A is the proposed MSHCP alternative.

Recommendations: EPA recommends the rationale for selecting the proposed alternative be included in the Final EIS after review of comments obtained during Draft EIS public comment process and possible revision(s) to the proposed alternative.

The Draft EIS indicates that Alternative D is the No Action Alternative.

[4] Sensitive bat hibernacula generally include Priority 1 and Priority 2 hibernacula as identified by the Service at the time the plan was developed.

Recommendations: Typically, the No Action Alternative is the baseline against which all action alternatives are compared; therefore, EPA recommends the Final EIS be revised to reflect the No Action alternative as the baseline (Alternative A). This revision will allow readers to easily understand resultant conditions without implementation of the MSHCP and resultant conditions under each of the action alternatives. Further, this revision will reduce the need to refer to sections of the EIS that the reader has not yet reached (e.g., page 4.1-54 references "effects to Kirtland's warbler similar to those described under Alternative D, Section 4.1.6.2").

Table 2-3 – Survey Requirements – Alternative A, Survey Requirement (SURE) 2 for Proposed Wind Energy Facilities: Conduct Presence/Absence Surveys to Determine Occurrence of Covered Bat Species and Presence of Significant Habitat or Resources

As indicated in the Draft EIS as part of SURE2, "Where bat habitat is identified based on the results of habitat surveys in SURE1, pre-construction presence/absence surveys will be conducted for covered bat species within the proposed facility site to detect the presence or likely absence of covered bat species."

Recommendations: In the Final EIS, EPA recommends SURE2 be clarified to indicate whether "the proposed facility site" includes the area within a 2.5 mile radius of the facility site boundary, as stated in SURE1.

Table 2-3 – Survey Requirements – Alternative A, SURE2 for Existing Wind Energy Facilities

As indicated in the Draft EIS as part of SURE2, "Existing wind energy facilities are required to conduct summer covered bat species presence/absence surveys prior to applying for a take authorization. Presence/absence surveys will be conducted in accordance with the USFWS approved survey methods described in Appendix G of the MSHCP and as amended in the future. Survey reports, including all raw data, must be submitted with ITP applications and COI requests."

Recommendations: In the Final EIS, EPA recommends SURE2 be clarified to explain why surveys must be conducted only during summer months for existing facilities. This comment is based on the Service's finding that most bat fatalities occur during spring and fall months. EPA recommends shifting, or expanding, the survey period to include spring and fall.

Table 2-3 – Survey Requirements – Alternative A, SURE3: Determine the Presence of Covered Bird Species Habitats for Proposed Wind Energy Facilities

As indicated in the Draft EIS as part of SURE2, "If a proposed wind energy facility is located within the range of a covered bird species, pre-construction surveys must be conducted for covered bird species habitat at facility sites (for Kirtland's warbler within a 1 mile radius of the facility site

boundary – see SURE5). The presence of covered bird species habitat within the facility site may be determined by a desktop and/or ground-based analysis of to determine the presence of covered bird species habitat types (e.g., foraging, nesting, migration). A map of all covered bird species habitat must be produced at a minimal mapping unit of 1 acre. The information gathered during this assessment of habitat is the basis for designing and implementing preconstruction presence/absence surveys for covered bird species (see SURE4)."

Recommendations: In the Final EIS, EPA recommends SURE3 be clarified regarding the following three issues. First, indicate whether a buffer around the facility site boundary must be surveyed (refer to SURE1). Second, provide the rationale for the determination that surveys for Kirtland's warblers must be conducted within a 1-mile radius of the facility site boundary versus the 2.5 mile area for bats should be included here. Third, clarify how and when a desktop and/or ground-based analysis is required "depending on site conditions and available data using a desktop (e.g., remote sensing using aerial imagery and existing land cover data) and/or ground-based analysis to identify habitat types (e.g., foraging habitat, hibernacula, maternity roosts, swarming habitat)" as stated for SURE1.

Table 2-3 – Survey Requirements – Alternative A, SURE4: Conduct Presence/Absence Surveys for Interior Least Tern, Piping Plover, and Bald Eagle for Proposed Wind Energy Facilities

As indicated in the Draft EIS as part of SURE4, "If nesting, foraging, or high quality migration habitat is found to occur for interior least tern, piping plover, and bald eagle within the boundary of a proposed or existing wind energy facility (see SURE3), species-specific presence/absence surveys must be conducted in the habitat to detect the presence or likely absence of the applicable covered bird species. … It is anticipated that habitats for interior least tern and piping plover are not present within the Covered Lands; however, if habitat for these species is present, the project proponent will coordinate with the USFWS to determine the survey methods."

Recommendations: In the Final EIS, EPA recommends SURE4 be clarified to indicate whether a buffer around the facility site boundary within which presence/absence surveys must be conducted will be established for interior least tern, piping plover, and bald eagle. If not, the document should specify how that conclusion was reached.

Table 2-3 – Survey Requirements – Alternative A, SURE4: Conduct Presence/Absence Surveys for Interior Least Tern, Piping Plover, and Bald Eagle for Existing Wind Energy Facilities

As indicated in the Draft EIS as part of SURE4, "Existing wind energy facilities are required to implement surveys for interior least tern and piping plover as described for proposed facilities. Bald eagle surveys are not required as described for proposed facilities. The determination of presence/absence of bald eagles will be based on an assessment of existing bald eagle surveys and other relevant available information."

Recommendations: In the Final EIS, the description of SURE4 should be clarified to indicate whether a buffer around the facility site boundary within which presence/absence surveys must be conducted will, or will not, be established for interior least terns and piping plovers. If not, the document should specify how that conclusion was reached.

Table 2-3 – Survey Requirements – Alternative A, SURE5: Conduct Surveys to Determine Occurrence of Kirtland's Warbler, Level of Habitat Use, and Presence of Significant Habitat or Resources for Proposed Wind Energy Facilities

As indicated in the Draft EIS as part of SURE5, "For proposed wind energy facilities that are sited outside of a Kirtland's Warbler Management Areas (KWMA; see Figure 4-6 of the MSHCP), but support Kirtland's warbler nesting habitat (see Figure 5-1 of the MSHCP) within 1 mile of proposed wind turbine locations, pre-construction surveys must be conducted within 5 years before the initiation of construction to determine the presence of habitat and the presence/absence of Kirtland's warblers in or within 1 mile of the facility site (see Figure 5-1 of the MSHCP). Kirtland's warbler surveys will be conducted by a qualified biologist with required permits using the survey methods described in Appendix G of the MSHCP. If a singing male is detected, it is assumed that the habitat is occupied by a breeding pair of Kirtland's warblers."

Recommendations: In the Final EIS, EPA recommends SURE5 be clarified regarding the following two issues. First, provide the rationale for indicating pre-construction surveys must be conducted within 5 years before initiation of construction to determine presence of habitat and presence/absence of Kirtland's warblers if Kirtland's warblers are expanding their range. Second, provide the rationale for indicating that pre-construction surveys must be conducted within 1 mile rather than 2.5 miles (see SURE1).

Table 2-5 - General Avoidance and Minimization Measures for Covered Bird Species – Alternative A, Avoidance and Minimization Measure (AMM) 8: Permanent Meteorological Towers Must Be Free Standing with No Guy-Wires

As indicated in the Draft EIS as part of AMM8, "This AMM applies to proposed wind energy facilities. Permanent meteorological towers associated with proposed wind energy facilities must be constructed without guy-wires. Temporary meteorological towers with guy-wires may be constructed, but must be fitted with bird flight diverters or high visibility marking devices and removed within 1 year of initial facility operations unless otherwise approved by the USFWS."

Recommendations: In the Final EIS, EPA requests the Service recommend existing facilities 'upgrade' as soon as feasible (and define a timeframe within which the upgrade must be accomplished), per the above requirements for proposed wind facilities.

Table 2-5 - General Avoidance and Minimization Measures for Covered Bird Species – Alternative A, AMM9: Bury Collector and Communication Lines and Follow Avian Power Line Interaction Committee's (APLIC) Standards for Proposed Wind Energy Facilities

As indicated in the Draft EIS as part of AMM9, "Connector and communications lines must be buried unless, with the concurrence of the USFWS, burial of the lines is impracticable (e.g., where shallow bedrock exists) or where greater adverse impacts to biological resources would result. Above-ground low and medium voltage lines, transformers and conductors will follow the 2012 or most recent APLIC Suggested Practices for Avian Protection on Power Lines. Overhead lines may be used when the lines parallel tree lines, employ bird flight diverters, or are otherwise screened so that collision risk is reduced. Overhead lines may be acceptable if sited away from high-use bird crossing locations (e.g., between roosting, nesting, and feeding areas. The lines should be marked in accordance with APLIC collision guidelines. For proposed wind energy facilities, planned associated power and communications lines will be either buried or clearly marked following APLIC standards to deter bird strike.

Recommendations: In the Final EIS, EPA recommends AMM9 be clarified to indicate lines should be marked in accordance with most recent APLIC collision guidelines.

Table 2-5 - General Avoidance and Minimization Measures for Covered Bird Species – Alternative A, AMM9: Bury Collector and Communication Lines and Follow APLIC Standards for Existing Wind Energy Facilities

As indicated in the Draft EIS as part of AMM9, "Any new connector and communications lines that may be installed over the term of the MSHCP must be buried as described for proposed wind energy facilities."

Recommendations: In the Final EIS, EPA recommends AMM9 be clarified to indicate existing facilities will 'upgrade' to include AMM9 requirements directly above for proposed wind facilities (and define a timeframe within which the upgrade must be accomplished)

Table 2-6 - Species-Specific Avoidance and Minimization Measures – Alternative A, Indiana Bat, Northern Long Eared-Bat, and Little Brown Bat, Avoidance and Minimization Measure (AMM) Indiana Bat, Northern Long Eared-Bat, and Little Brown Bat (INBA) 1: During All Times of Year and Periods of Night When Indiana Bat May Be at Risk, Feather All Turbines Prior to Reaching Manufacturer Set or Bat-Specific (Tailored) Cut-In Speeds

As indicated in the Draft EIS as part of AMM INBA1, "Applicable cut-in speed restrictions in Table 5-4 of the MSHCP will be in effect from 30 minutes before sunset to 30 minutes after sunrise

at facilities potentially affecting a maternity colony or swarming/staging areas, and from sunset to sunrise under other site conditions. Turbines need not curtail cut-in speeds as described in Table 5-4 if air temperatures are at or below 50 degrees Fahrenheit (°F) based on a rolling average of 10 minutes. For proposed wind energy facilities, if the temperature rises above 50°F based on a 10-minute rolling average, turbines must return to the applicable site-specific cut-in speed in Table 5-4 of the MSHCP. Existing wind energy facilities will return to the applicable site-specific cut-in speed in Table 5-4 of the MSHCP as quickly as possible within the technological limits of the facility."

Recommendations: In the Final EIS, EPA recommends AMM INBA1 be clarified to indicate how facilities potentially affecting a maternity colony or swarming/staging area will be determined (see AMM GEN3 – "at least 1,000 feet from documented summer period covered bat species capture locations, documented maternity colonies, and patches of forest and wetlands, tree lines, and riparian corridors").

Recommendations: The above language from AMM INBA1 indicates that existing wind energy facilities will return to the applicable site-specific cut-in speed "as quickly as possible within the technological limits of the facility." EPA recommends a timeframe for proposed wind energy facilities to return to the applicable site-specific cut-in speed as noted in Table 5-4 of the MSHCP be included in the Final EIS and the HCP.

Table 2-6 - Species-Specific Avoidance and Minimization Measures – Alternative A, Kirtland's Warbler, AMM Kirtland's Warbler (KIWA) 4: Implement Operational Shut-Downs for Kirtland's Warbler During High Risk Periods and in Specific High Risk Areas

As indicated in the Draft EIS as part of AMM KIWA4, "This AMM applies to new and existing wind energy facilities. The following operational shut-downs for Kirtland's warbler will be applied during the following high risk periods and in identified specific high risk areas: …"

Recommendations: EPA recommends AMM KIWA1 be clarified to indicate what constitutes "identified specific high risk areas" in the Final EIS and the HCP.

Table 2-7 - Cut-In Speeds by Season for Covered Bat Species – Alternative A

As indicated in the Draft EIS as footnote 1 of Table 2-7, "Take must not exceed the authorized limit, and if take approaches the authorized limit, cut-in speeds *may* be adjusted through adaptive management to ensure authorized limit is not exceeded." (Emphasis added)

Recommendations: EPA recommends the rationale for deciding that cut-in speeds may be adjusted if take approaches the authorized limit be included in the Final EIS and the HCP. What other activities would be available to a wind energy facility to sustain take below or at the authorized limit?

Section 2.2.1.2 - Conservation Strategy, Compensatory Mitigation

As indicated in this section of the Draft EIS, "The conservation strategy for Alternative A includes mitigation to compensate for the direct take of Covered Species and the loss or *degradation of occupied habitat* from implementation of Covered Activities. As summarized below, the type and amount of mitigation required to address the impact of take of Indiana bat, northern long-eared bat, little brown bat, and bald eagle will be calculated using the Service's species-specific Resource Equivalency Analysis (REA) model. Similarly, the Service's species-specific Habitat Equivalency Analysis (HEA model) will be used to identify required compensatory mitigation for the loss and/or *degradation of occupied habitat* for the covered bat species, Kirtland's warbler, and bald eagle." (Emphasis added)

Recommendations: EPA recommends the Final EIS and HCP include clarification of the phrase "degradation of occupied habitat." Adding clarification and possibly examples of degradation of occupied habitat to these documents will provide more certainty to wind energy operators when using the HEA model.

Section 2.2.1.2 - Conservation Strategy, Compensatory Mitigation, Covered Bat Species

As indicated in this section of the Draft EIS, "Individual wind energy facilities will be required to use the REA model to calculate project-specific mitigation debts and the corresponding amounts of summer and winter habitat to be mitigated. Additionally, the selection of suitable mitigation sites will be based on the characteristics of specific project impacts."

Recommendations: EPA recommends the Final EIS and HCP clarify the Service's role in ensuring that the individual wind energy facility's calculation to determine project-specific mitigation debts and the corresponding amounts of summer and winter habitat to be mitigated is accurate.

Section 2.2.1.2 - Conservation Strategy, Compensatory Mitigation, Bald Eagle

As indicated in this section of the Draft EIS, "Mitigation actions are designed to increase bald eagle survival and reproductive potential by 1) protecting and maintaining existing occupied habitat to maintain the distribution and availability of nesting and winter roost sites, and 2) reducing unnatural sources of bald eagle mortality. Mitigation requirements for take associated *with existing wind energy facilities* that receive take authorizations will be calculated on a per facility basis f*or new wind energy facilities*." (Emphasis added)

Recommendations: This sentence is confusing, and EPA recommends clarification in the Final EIS.

Section 2.2.1.2 - Conservation Strategy, Compensatory Mitigation, Monitoring and Reporting

As indicated in this section of the Draft EIS, "Annual reports documenting the results of all monitoring efforts will be submitted to the Service for review." The reader is directed to Chapter 7, *Monitoring, Adaptive Management, and Reporting*, of the MSHCP. Section 7.6, Database Development indicates "The AIE will develop and maintain one or more databases of all reporting-related information submitted to the AIE by COI-holders. These databases must be accessible by the USFWS. Information contained in the database will include, but not be limited to, the following information." Further, Section 7.2.2 Reporting of the HCP indicates, "A description of compliance monitoring activities and monitoring results must be submitted in Annual Compliance Reports in accordance with the provisions of Section 9.10.1. Any take of a Covered Species must be reported to the USFWS within 2 business days upon documenting that take has occurred (see Section 9.10.2). All reported information, including the documentation of Covered Species fatalities, will be publicly available information."

Recommendations: EPA recommends the Final EIS and HCP clarify the role of annual reports and AIE-developed/maintained databases of all reporting-related information submitted to the Administrative Implementing Entity (AIE) by COI-holders in informing the Service and the public of annual reports, monitoring efforts, and observed species take. This section should also indicate if these reports will be made available to the public, and, if so, in what manner will the public be alerted to their availability?

Section 3.0.1 - Plan Area, Covered Lands, and Study Area

As indicated in this section of the Draft EIS, "As described in Section 2.1.2, *Plan Area and Covered Lands*, each action alternative would be implemented within an eight-state *Plan Area* that encompasses all lands under the jurisdiction of the Midwest Region of the Service, including Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. The geographic area where incidental take authorization will be allowed under the action alternatives, referred to as *Covered Lands*, is a subset of the Plan Area and specifically excludes lands of particular importance to bat and migratory bird species, as well as a wide range of other wildlife. The following areas are excluded from Covered Lands:

- Land within 20 miles of sensitive bat hibernacula identified by the Service and state wildlife agencies;
- Land within 3 miles of the shores of the Great Lakes;
- Land within 1 mile of the edges of major rivers supporting bird migration corridors and/or concentrations of wintering waterfowl;
- Land within floodplain areas along the Mississippi and Illinois rivers;
- Land near high bat concentration areas in southern Indiana; and
- Land within bird migratory areas in Illinois and around large lakes in Minnesota."

Recommendations: In the Final EIS, EPA recommends clarification of "*supporting bird migration corridors and/or concentrations of wintering waterfowl,*" "*land near high bat concentration areas in southern Indiana,*" and "*land within bird migratory areas in Illinois and around large lakes in*

Minnesota." These clarifications should provide greater understanding of the parameters of the HCP for existing wind energy operators and for wind energy developers.

Section 3.1.1 - Study Area and Approach, Covered Species, Other Rare, Endangered, Threatened and Candidate Species, and Other Wildlife, Fish and Aquatic Species

As indicated in this section of the Draft EIS, "The NLCD and CEC and EPA ecoregion GIS analyses completed to characterize the vegetation communities in the study area were also used to inform habitat and species descriptions. In addition, the MGIN and critical habitat GIS data layers were overlain with the study area to quantify and describe terrestrial and aquatic habitats in the study area by state. The MGIN data layer maps the most ecologically viable terrestrial and aquatic habitat in the study area with the greatest potential to support wildlife, including federally and state-listed threatened and endangered species."

Recommendations: EPA recommends the Final EIS provide additional information regarding how The Conservation Fund's Midwest Green Infrastructure Network GIS data (MGIN) habitat relates to the Covered Lands. If a GIS overlay of the MGIN habitat in relation to the Covered Lands is available, we recommend this display be added in the Final EIS.

Section 4.2.1.2, Wind Energy Development Potential ("Build-Out") Model

As indicated in this section of the HCP, "To aid in estimating the potential level of Covered Species take associated with the future development of 33,000 MW of wind energy development under the MWE (see Chapter 2), a model was developed to spatially generate a reasonable simulation of potential locations of future wind energy facilities within the Covered Lands (see Section 1.6). It is not exactly known where wind energy facilities will be developed, but a predictive model can be used to generate realistic scenarios of how build-out of future wind energy development might be distributed across the Covered Lands. A model for build-out of wind energy facilities that are included in the Covered Activities (referred to as the "build-out model") was specifically developed for the take assessment. This spatial model was used for estimating impacts on Covered Species habitat and for estimating the potential level of Covered Species take associated with wind turbine operations. The details of the build-out model used to describe the baseline conditions and future wind energy development are provided in Appendix B."

Recommendations: EPA acknowledges that baseline environmental conditions include wind energy development existing development through March of 2015 and projected wind energy development from April through December 2015. EPA also acknowledges the above information as well as that found in Appendix B: Midwest Wind Energy Multi-Species Habitat Conservation Plan (MWE) Wind Development Build-Out Model. Nevertheless, EPA has located information concerning another HCP/EIS currently being developed for wind energy projects in Iowa – the MidAmerican Wind Energy Habitat Conservation Plan; Draft Environmental Impact Statement[5] – which is currently in the scoping phase. Because this project has already begun the NEPA phase,

[5] https://www.federalregister.gov/articles/2016/04/28/2016-09945/midamerican-wind-energy-habitat-conservation-plan-draft-environmental-impact-statement and http://www.fws.gov/midwest/rockisland/te/MidAmericanHCP.html

EPA recommends the Final EIS and HCP address whether this project has been included in the Build-out Model, and thus potential effects from operation included in the MSHCP analysis. The FEIS should explain how these two EISs interrelate, since each covers Iowa.

Section 5.1.2, Wind Energy Facility Survey Requirements, SURE4: Conduct Presence/Absence Surveys for Interior Least Tern, Piping Plover, and Bald Eagle for Proposed Wind Energy Facilities

As indicated in this section of the HCP, "If nesting, foraging, or *high quality migration habitat* is found to occur for interior least tern, piping plover, and bald eagle within the boundary of a proposed or existing wind energy facility (see SURE3), species-specific presence/absence surveys must be conducted in the habitat to detect the presence or likely absence of the applicable covered bird species." (Emphasis added)

Recommendations: EPA recommends clarification of "*high quality migration habitat.*" This clarification should provide greater understanding of the parameters of the HCP for wind energy developers.

Section 5.1.3.1.2, Covered Bird Species, AMM GEN7: Lighting Protocol for Turbines/Substation/Meteorological Towers for Existing Wind Energy Facilities

As indicated in this section of the HCP, "If the existing obstruction avoidance lighting has not been approved by FAA, the necessary lighting to achieve compliance must be installed. Any additional lighting installed over the term of the MSHCP will comply with the requirements described for proposed wind energy facilities."

Recommendations: In the Final EIS and HCP, EPA requests the Service recommend existing facilities replace non-motion detector lighting and/or non-infrared light sensors as soon as possible or within a specific phased timeframe, rather than declaring that additional lighting installed over the term of the MSHCP will comply with requirements described for proposed wind energy facilities. Mass fatality incidents are well documented for lighting that has been left on during the night as stated in the "Rationale' section for this AMM.

Section 5.1.3.3 Best Management Practices (BMPs)

As indicated in this section of the HCP, "The following BMPs will assist proposed and existing wind energy facilities to reduce the risk for impacts on non-covered bird species protected under the Migratory Bird Treaty Act, tree bat species, and other species of native wildlife. The BMPs are derived from the USFWS Land Based Wind Energy Guidelines (USFWS 2012g). Participating wind energy companies will also implement additional BMPs as are necessary to comply with other federal, state, and local environmental laws and regulations (e.g., Clean Water Act, Rivers and Harbors Act, Clean Air Act handling of toxic substances, invasive species containment and control

measures). of how these BMPs will be implemented and, if applicable, the reason for deviations from the BMPs (e.g., technological or other constraints; see Sections 9.4.1 and 9.4.2)."
Recommendations: The third sentence of this section is confusing, and EPA recommends clarification in the HCP.

EPA appreciates the opportunity to review and comment on this Draft Environmental Impact Statement. We are available to discuss our comments with you in more detail, if desired. Please send a hard copy and a CD of the Final EIS to our office. If you have any questions about this letter, please contact the lead project reviewer, Kathy Kowal, at 312-353-5206 or via email at kowal.kathleen@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosures: Ratings Definitions